

Rework of Main Power Cable (Document PN 30A177, rev. 8-15-2006)

Purpose

This procedure will accomplish three modifications:

1. The brown-and-white-striped wires to the temperature probe will be separated from other wires and will be brought closer to the front (controller) end of the cable. **(Gas fryers only)**
2. The orange-and-blue-striped wire to the heater will be isolated from other wires. **(Gas and Electric fryers)**
3. The black wire and the white wire to the heater will be entirely removed from the cable. **(Gas and Electric Fryers)**

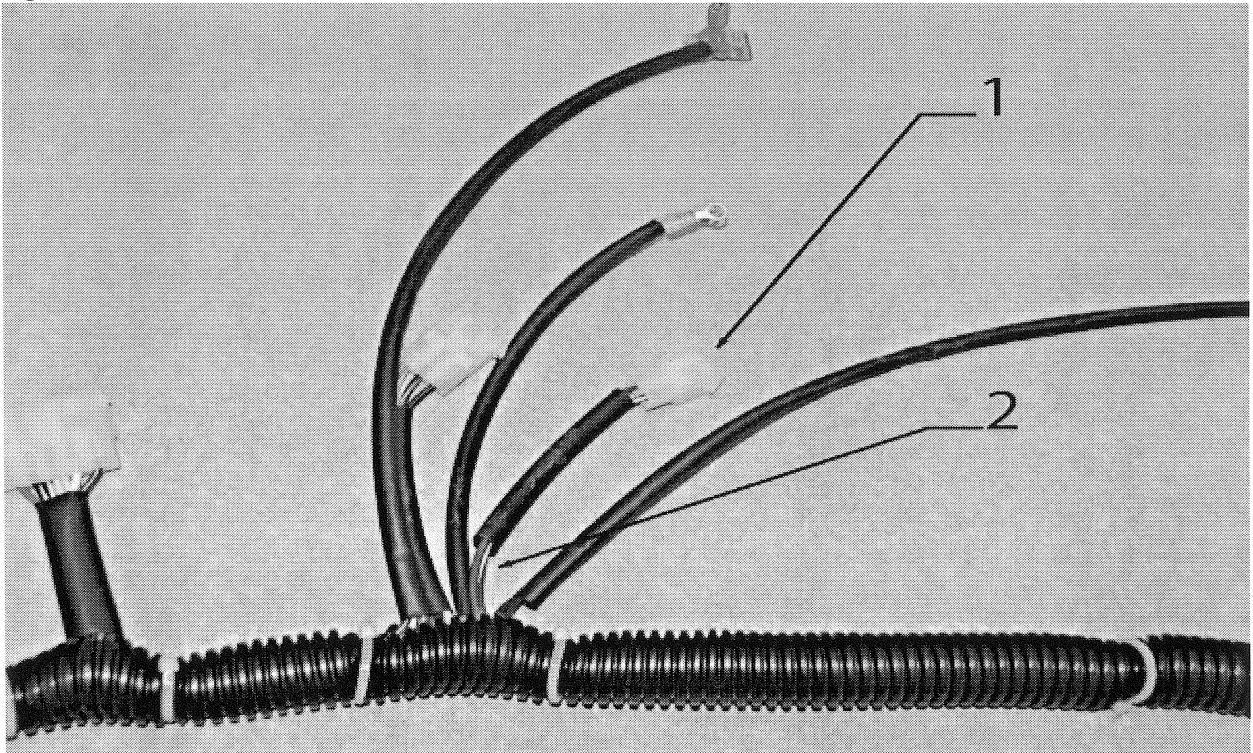
A. Isolating the Wires for the Temperature Probe (GAS FRYERS ONLY)

Parts Needed:

- Main Power Cable for Gas Fryer (PN 22A320)
- Female Pin / Socket (PN 23304), quantity 2
- White Plastic Tie Wraps (PN 33003), quantity 2-3

1. Locate the **2 brown-and-white-striped wires** in the wire bundle that is about 24 inches from the front end of the cable (i.e., the end of the cable that attaches to the controller). These wires terminate in the same female 2-pin connector housing (see Figure a1).

Figure. a1



1	Female 2-pin connector housing
2	Brown-and-white-striped wire

2. Open the main cable's corrugated sheath about 8 inches from the end of the cable that plugs into the computer. Locate the 2 brown-and-white-striped wires within the sheath.
3. Carefully pull the brown-and-white-striped wires out of the cable's corrugated sheath and toward the front end of the cable. (If necessary, clip off and discard any white plastic tie wraps that are keeping the wires from being pulled out.) Keep pulling until the wires are sticking out from the corrugated sheath about 8 inches from the end of the cable.

4. On both sides of the brown-and-white-striped wires, wrap and secure white plastic tie wraps around the corrugated sheath. Use more tie wraps as needed to close the corrugated sheath and to secure the wire bundle that had previously contained the brown-and-white-striped wires.
5. Locate the rubber insulation tubing wrapped around the brown-and-white-striped wires. Slide this tubing away from the end of the brown-and-white-striped wires and towards the main cable.
6. Cut the brown-and-white-striped wires so that about 4 inches of the wires are sticking out from the corrugated sheath.
7. Remove the female 2-pin connector housing from the length of wire that has just been cut off. Remove the pins from the connector housing and set the connector housing aside.
8. Strip the ends of the brown-and-white-striped wires that are sticking out from the main cable.
9. Crimp a female pin / socket onto the end of each brown-and-white-striped wire.
10. Install the female 2-pin connector housing (see step #7 above) onto the brown-and-white-striped wire ends.

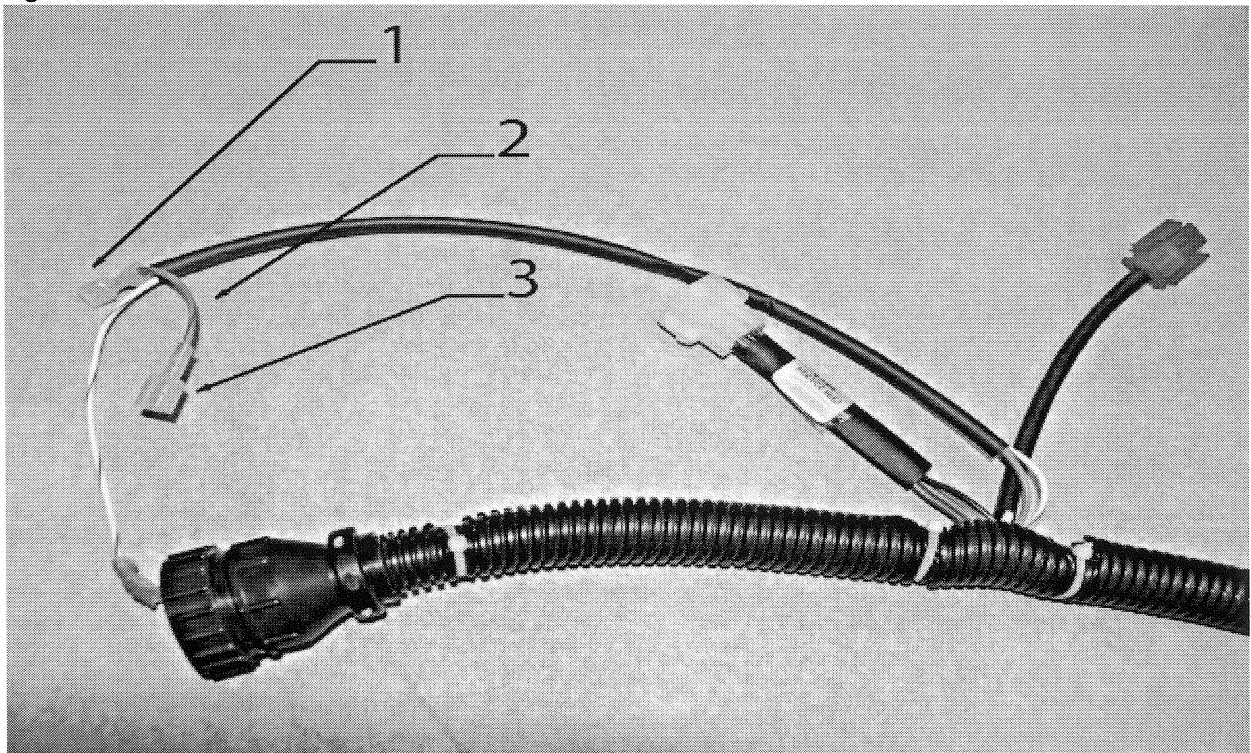
B. Isolating the Orange-and-Blue Striped Wire for the Heater (ALL FRYERS)

Parts Needed:

- Main Power Cable (PN 22A320 for gas fryers, PN 22A321 for electric fryers)
- Male Pin (PN 23305), quantity 1
- Male 2-Pin Connector Housing (PN 23288), quantity 1

1. Locate the **orange-and-blue-striped wire** in the wire bundle that is about 9 inches from the rear end of the cable (i.e., the end of the cable that attaches to the power box). This wire has a **pink quick-connector** at its end and a **blue quick-connector** about 2 inches from its end. It is in the same rubber insulation tubing as the white-and-red-striped wire (see Figure b1).

Figure. b1



1	Blue (female) quick-connector
2	Orange-and-blue-striped wire
3	Pink (male) quick-connector

2. Cut off the segment of the orange-and-blue-striped wire with the pink and blue quick-connectors on it. Discard this segment and the attached quick-connectors.
3. Grip the orange-and-blue-striped wire at the other end of the rubber insulation tubing. Pull the orange-and-blue-striped wire out of the rubber sheath to separate the orange-and-blue-striped wire

from the white-and-red wire.

4. Cut the orange-and-blue-striped wire so that about 6 inches of the wire is sticking out from the main cable's corrugated sheath.
5. Strip the end of the orange-and-blue-striped wire and crimp a male pin onto the end.
6. Insert the end of the orange-and-blue-striped wire into position #2 of a male 2-pin connector housing.

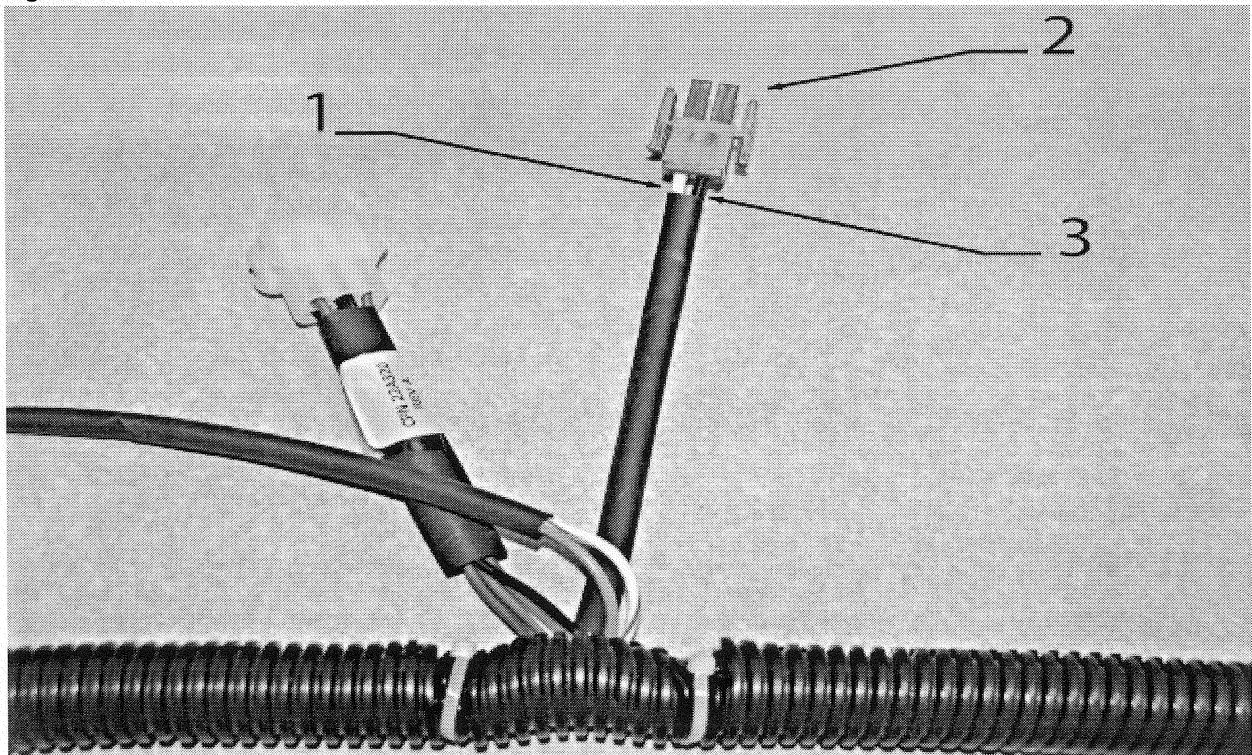
C. Removing the Black and White Wires for the Heater (ALL FRYERS)

Parts Needed:

- Main Power Cable (PN 22A320 for gas fryers, PN 22A321 for electric fryers)
- White Plastic Tie Wraps (PN 33003), quantity 1-2

1. Go to the circular 24-pin connector of the rear end of the cable (i.e., the end of the cable that attaches to the power box). Unscrew and remove the ring clamp at the base of the 24-pin connector. Clip off any white plastic tie wraps that may be at this end of the cable (see Figure c1).

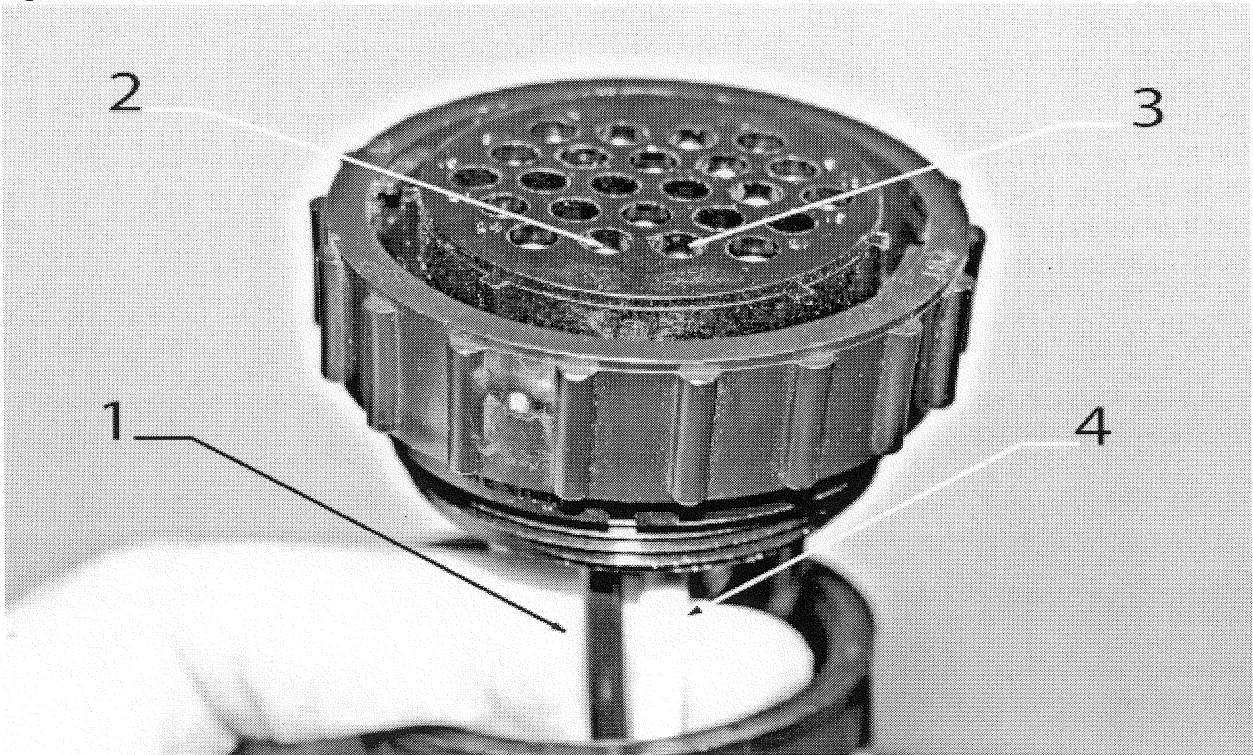
Figure. c1



1	White wire (in protective sleeve)
2	Male (red) 2-pin connector housing
3	Black wire (in protective sleeve)

2. Inspect the wires that are connected to the 24-pin connector. A **white wire** should be connected to **position 22** of the 24-pin connector, and a **black wire** should be connected to **position 23** (see Figure c2).

Figure. c2



1	Black wire
2	Position 23 with black wire pin
3	Position 22 with white wire pin
4	White wire

3. Use a pin pusher to push the white wire out of position 22 of the 24-pin connector. Then push the black wire out of position 23.
4. Find the other end of the black wire and the white wire in the wire bundle 9 inches from the end of the cable. The black and white wire ends terminate in the same **red (male) 2-pin connector housing**.
5. Grab the red connector housing and carefully pull the black and white wires entirely out of the main cable's corrugated sheath. Cut off any white plastic tie wraps if the wire ends get caught within the corrugated sheath. Discard the black and white wires and the attached connector.
6. Reassemble the ring clamp of the circular 24-pin connector. If necessary, replace any white plastic tie wraps that had been removed.